IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

Plaintiff.

VS.

LM ERICSSON TELEPHONE COMPANY (TELEFONAKTIEBOLAGET LM ERICSSON)

QUALCOMM, INC.

ALCATEL-LUCENT USA INC.

and

THIRD GENERATION PARTNERSHIP PROJECT A/K/A 3GPP

Defendants.

Case No. 2:11-cv-4574-RK

ANSWER AND AFFIRMATIVE DEFENSES OF DEFENDANT QUALCOMM

Defendant Qualcomm Incorporated ("Qualcomm") hereby answers and provides affirmative defenses to the Amended Complaint of Plaintiff TruePosition, Inc. ("TruePosition"):

- 1. Qualcomm denies the allegations of paragraph 1.
- 2. Qualcomm denies the allegations of paragraph 2.
- 3. Qualcomm admits that Federal Communications Commission ("FCC") regulations require "all mobile voice networks [to] be able to locate 911 callers". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 3.
- 4. Qualcomm admits that TruePosition's technology is included in technical specifications developed by 3GPP for 2G and 3G mobile communications technologies, and that the words TruePosition quotes from *Golden Bridge Tech. v. Nokia, Inc.*, 416 F. Supp. 2d 525, 532 (E.D. Tex. 2006), appear in that opinion. Qualcomm denies that TruePosition's technology is "equally well suited to provide high-accuracy positioning in 4G networks". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 4.
- 5. Qualcomm denies that it was part of a conspiracy, that it violated 3GPP and ETSI rules, that it "biased the 3GPP process to gain unfair advantages for" OTDOA and "to prevent or delay standardization of" UTDOA, and that "Standardization implicitly is an agreement not to manufacture, distribute, or purchase products that do not follow the standard". Qualcomm also denies that any technology that the defendants preferred was "inferior", and that TruePosition's technology was "superior". Qualcomm admits that the words TruePosition quotes from *Broadcom Corp. v. Qualcomm, Inc.*, 501 F.3d 297, 309-10 (3d Cir. 2007), appear in that opinion. The remaining allegations of paragraph 5 are legal conclusions to which no response is required.
- 6. The allegations in paragraph 6 regarding technologies that "should have been rolled into the 4G standards as a matter of course" "Under 3GPP rules and policies" present legal conclusions to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 6 concerning "defendants' technology", which is not defined, or about any such technology being "replaced" by products from TruePosition and others based on UTDOA. Qualcomm denies the remaining allegations of paragraph 6.
- 7. Qualcomm denies the allegations of paragraph 7.
- 8. Qualcomm denies the allegations of paragraph 8.
- 9. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 9 regarding TruePosition's subjective basis for bringing this case. Qualcomm denies facts suggested in each bullet point in paragraph 9 to the extent they charge or insinuate wrongdoing by Qualcomm.

- 10. Qualcomm admits that TruePosition has participated in 3GPP. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 10.
- 11. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 11.
- 12. Qualcomm denies that it "has more than 88,000 patents". Qualcomm admits the remaining allegations of paragraph 12.
- 13. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 13.
- 14. Qualcomm admits that 3GPP is "a not-for-profit SSO located in France", and that technical specifications developed by 3GPP "are designed to be implemented globally through six regional standards-setting organizations, known as Organizational Partners, including defendant ETSI in Europe and the Alliance for Telecommunications Industry Solutions in the United States". Qualcomm admits that "The membership of 3GPP comprises hundreds of international companies that participate through their membership in an Organizational Partner". Qualcomm admits that "meetings of the 3GPP are held in various countries of the world, frequently in the United States". Qualcomm admits that it, defendant Ericsson, and defendant Alcatel-Lucent (the "corporate defendants") "are members of and participate actively in 3GPP". Qualcomm denies that the corporate defendants "exert strong influence over 3GPP", and that the corporate defendants possess "general industry dominance". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 14.
- 15. Qualcomm admits that "ETSI is a not-for-profit SSO located in France", and that ETSI "is one of the Organizational Partners of 3GPP". Qualcomm admits that it is a member of and "participate[s] actively" in ETSI. Qualcomm admits that representatives of Qualcomm periodically hold various elected or appointed positions within ETSI and 3GPP. Qualcomm denies that it "exert[s] strong influence over ETSI". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 15.
- 16. The allegations of paragraph 16 are legal conclusions to which no response is required.
- 17. Qualcomm admits that it sells telecommunications equipment in U.S. interstate and foreign commerce. Qualcomm denies that it derives billions of dollars of revenue from sales in the United States and that it obtains millions of dollars in sales of equipment and services in the Eastern District of Pennsylvania. The allegations of paragraph 17 regarding venue, 15 U.S.C. § 4, and 28 U.S.C. §§ 1331 and 1337 are legal conclusions to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the remaining allegations of paragraph 17.

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- 18. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 18.
- 19. Qualcomm admits that TruePosition sells positioning technology "as a standalone Location Measurement Unit ('LMU')", and that these LMUs communicate with RAN equipment. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 19.
- 20. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 20.
- 21. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 21.
- 22. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 22 that (1) "The primary use for TruePosition's high accuracy positioning technology in the United States is to locate mobile phones that call emergency services such as E-911", (2) "According to the FCC, nearly 70 percent of all E-911 calls originate from mobile phones", (3) the FCC "has been considering whether to adopt regulations specific to the location of indoor callers", and (4) "TruePosition's U-TDOA technology meets current FCC requirements, can meet the recently-announced future FCC requirements, and is uniquely adapted to provide indoor location". The remaining allegations of paragraph 22 are legal conclusions to which no response is required.
- 23. Qualcomm admits that positioning technology may be used by homeland security and law enforcement personnel. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 23.
- 24. Qualcomm admits that "TruePosition's U-TDOA method is implemented in LMUs located at multiple cell towers". Qualcomm admits that "Multiple LMUs measure the difference in the time they receive signals sent over the cellular network by a handset (referred to as the 'uplink' transmission)", and that these measurements enable an attempt to calculate the position of the handset. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 24.
- 25. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 25.
- 26. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 26.
- 27. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 27.
- 28. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 28.

- 29. Qualcomm admits that OTDOA is a "handset-based" technology in which the handset measures the difference in timing between signals received over a cellular network from several cell towers, and that this can be referred to as a "downlink" transmission. Qualcomm denies that OTDOA "has none of" the advantages of UTDOA that are alleged by TruePosition. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 29.
- 30. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 30.
- 31. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 31.
- 32. Qualcomm admits that at a certain time E-OTD technology did not meet FCC requirements, and that some United States mobile carriers implemented "U-TDOA products from manufacturers, including TruePosition and Andrew Corporation, in LMUs collocated with RAN equipment". Qualcomm denies that "The superiority of U-TDOA was demonstrated in 2G and 3G networks". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 32.
- 33. Qualcomm admits that ETSI is an SSO that develops "standards for advanced wireless and mobile telecommunications services". Qualcomm denies the remaining allegations of paragraph 33.
- 34. Qualcomm denies that "private standards setting relies on agreements among actual and potential competitors", that "Standardization at least implicitly constitutes an agreement not to manufacture, distribute or purchase products that do not follow the standard", that standardization "has the inherent propensity for unlawful collusion", and that "SSOs historically have been objects of antitrust scrutiny". The remaining allegations of paragraph 34 are legal conclusions to which no response is required.
- 35. Qualcomm denies that TruePosition accurately quotes from 3GPP rules and procedures. The allegations of paragraph 35 are otherwise legal conclusions to which no response is required.
- 36. Qualcomm admits that 3GPP's organizational structure includes "a Radio Access Network Technical Specification Group ('RAN TSG' or 'RAN Plenary') to create technical documents, known as 'Specifications,' for the structure and operation of RAN networks and equipment". Qualcomm admits that "The RAN TSG consists of five Working Groups (RAN1 through RAN5), each covering different aspects of the network, that perform the technical work of evaluating proposed work items and developing the draft Specification". Qualcomm admits that "Working Groups cover a wide range of technologies", and that they "typically meet monthly throughout the year, either separately or in conjunction with the TSG Plenary meetings". Qualcomm admits that these meetings typically "occur over a period of five days", and that they "are scheduled so as to rotate among different cities and various continents". Qualcomm admits that these meetings include breaks. Qualcomm denies that the corporate defendants "needed"

- "to violate . . . 3GPP rules", denies that they had to do so "collusively", denies that they "shared control of the necessary decision points", and denies that "decisions had to occur at a particular time and sequence". Qualcomm denies that "The structure of 3GPP presents rife opportunities" for "unlawful collusion". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 36.
- 37. Qualcomm admits that a work item "must list the support of at least four members to be considered by the Plenary", and that work items often have more than four such supporters. Qualcomm denies that work items "initially are created through private discussions among members of a Working Group outside the formal meeting context". Qualcomm denies that there is an "inherently collusive and potentially anticompetitive nature" within 3GPP. The allegation regarding what 3GPP rules require is a legal conclusion to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 37.
- 38. Qualcomm admits that "Updates to 3GPP Specifications are issued sequentially in a series of 'Releases", and that "The technologies and methods set forth in each Release may build upon or add to a prior Release". Qualcomm denies that "Once a Release is completed by 3GPP, it is adopted and promulgated as a standard by 3GPP's regional Organizing Partners, including ETSI".
- 39. Qualcomm admits that "The RAN TSG has a Chairman and generally three Vice Chairmen, and each RAN Working Group has a Chairman and generally two Vice Chairmen". The allegation in paragraph 39 that "a Chairman has the duty and obligation to strictly and impartially enforce the 3GPP due process rules and procedures so as to ensure that 3GPP standardization, at every stage, remains fair and unbiased" contains legal conclusions to which no response is required. Qualcomm denies the remaining allegations of paragraph 39.
- 40. Qualcomm denies that "the inherent authority of a Chairman within the SSO bureaucracy" is "strengthened by" "economic clout his or her company wields over the other 3GPP members". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 40.
- 41. Qualcomm admits that representatives of Ericsson, Qualcomm, and Alcatel-Lucent held various positions as Chairman during certain of the RAN TSG and Working Group meetings discussed in the Amended Complaint. Qualcomm denies TruePosition's characterization that these were "key" positions, and denies that a representative of one of the corporate defendants held Chairman positions at "each" meeting of these groups that made "crucial" decisions concerning the standardization of the positioning technologies at issue in this case. Qualcomm admits that Stephen Edge, a Qualcomm employee, led a System Architecture task force that worked on positioning technology in the latter part of 2008. Qualcomm admits that "The RAN Plenary was chaired by an Alcatel-Lucent representative in the December 2008 and March 2009 meetings". Qualcomm admits that "The RAN1 Working Group was chaired by an Ericsson representative" for a time that ultimately ended in September 2009, and that the RAN1 Working Group was next

chaired "by an Alcatel-Lucent representative". Qualcomm admits that "The RAN2 Working Group has been chaired by an Ericsson representative since September 2011". Qualcomm admits that "The RAN3 Working Group has been chaired by a Qualcomm representative since August 2009", and that "An Ericsson representative" is currently "the RAN3 Vice Chairman". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegation in paragraph 41 that for some uncertain time "An Ericsson representative has been Chairman or one of the four members of the leadership, of the Project Coordination Group, which is the highest decisionmaking body in 3GPP". Qualcomm denies the remaining allegations of paragraph 41.

- 42. Qualcomm denies that it "dominated"—by itself or with others—positioning for the GSM standard in the late 1990s, and denies that it "favored E-OTD positioning technology" because it "held patents that were essential to the E-OTD technology, for which [it] could collect substantial royalties if E-OTD were included in the standards". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 42.
- 43. Qualcomm admits that at a certain time E-OTD could not meet FCC requirements. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 43.
- 44. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 44.
- 45. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 45.
- 46. Qualcomm admits that 3GPP issued releases for UMTS technology, and that UMTS is generally considered a 3G technology. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 46.
- 47. Qualcomm admits that some form of UTDOA technology has at times been included in 3GPP Releases for GSM and UMTS systems since Release 6 in 2005. Qualcomm admits that some form of UTDOA has been "deployed in standalone LMUs in the United States". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 47.
- 48. Qualcomm denies that "U-TDOA technology is equally applicable to LTE systems". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 48.
- 49. Qualcomm denies the allegations of paragraph 49.
- 50. Qualcomm admits that Release 8 from 3GPP "was the first specification addressing 4G LTE networks". Qualcomm admits that "Release 8 did not include any positioning method". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 50.

- 51. Qualcomm admits that in 2008 the System Architecture group SA2 began work relating to positioning technology in 4G LTE standards. Qualcomm admits that Stephen Edge participated in those discussions, and that TruePosition participated in this work in SA2. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 51.
- 52. Qualcomm admits that Stephen Edge prepared a draft of a work item regarding positioning technologies in 2008. Qualcomm denies the remaining allegations in paragraph 52.
- 53. Qualcomm denies the allegations of paragraph 53.
- 54. Qualcomm admits that "The SA2 group met for several days in November 2008" to work on positioning. Qualcomm denies that Stephen Edge "kept secret the existence of the draft work item and its text from the SA2 group as a whole and specifically from TruePosition". Qualcomm denies that the corporate defendants "intended, understood, and agreed that the intention and text of the draft would not be shared with TruePosition or other U-TDOA equipment manufacturers", and denies that the corporate defendants "intended to use the work item in an effort to exclude or delay standardization for U-TDOA". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 54 that "A TruePosition representative had one or more one-on-one conversations with Edge regarding positioning during the course of [the relevant] SA2 meetings", and that "Edge never disclosed to her the existence of the draft work item or the corporate defendants' intention to submit a work item on positioning".
- 55. Qualcomm admits that "The draft work item contained a background section that described the 'Justification' for the work item", and that this section contained the language quoted in paragraph 55 of the Amended Complaint. Qualcomm denies that the draft work item stated that UTDOA or any particular positioning technology has been "essential to act as a backup to A-GPS". Qualcomm denies that "The draft emphasized that regions other than the United States were adopting regulatory requirements for positioning, and so the objective should be to define explicit positioning support for LTE that was as good, and potentially better, than positioning already provided for GSM and other wireless technologies".
- 56. Qualcomm admits that UTDOA is the only technology mentioned in the "Justification" section that is not also among the technologies proposed under this work item for inclusion in the 3GPP standards. Qualcomm denies the remaining allegations of paragraph 56.
- 57. Qualcomm admits that "At the December 2008 RAN Plenary #42 in Athens, Greece, the Plenary group met to determine features to be included and prioritized for Release 9". Qualcomm admits that it submitted a work item for OTDOA technology at the December 2008 RAN Plenary meeting. Qualcomm denies the remaining allegations of paragraph 57.

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- 58. Qualcomm denies that the proposed work item was submitted late. Qualcomm denies the remaining allegations of paragraph 58.
- 59. Qualcomm admits that the RAN Plenary Chairman at the 2008 RAN Plenary meeting was from Alcatel-Lucent. Qualcomm denies that the submission was late and that there was any agreement between the corporate defendants concerning an allegedly late submission. Qualcomm denies the remaining allegations of paragraph 59.
- 60. Qualcomm denies that "TruePosition and other companies were ambushed by the submission" of the work item, and denies that there was any "obvious deliberate violation of basic 3GPP submission rules by the corporate defendants". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 60.
- 61. Qualcomm admits that some form of UTDOA technology has in the past met certain FCC positioning requirements, and that OTDOA is related to E-OTD technology in some technical respects. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 61 that OTDOA had "no extant commercial implementations". Qualcomm denies the remaining allegations of paragraph 61.
- 62. Qualcomm admits that "The work item listed nine supporting companies in addition to the corporate defendants". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 62.
- 63. Qualcomm denies the allegations in paragraph 63.
- 64. Qualcomm admits that at the Plenary a representative of Qualcomm met with representatives of AT&T, Polaris Wireless, and TruePosition, and that one of the latter companies told Qualcomm that it would like UTDOA to be added to the work item. Qualcomm admits that UTDOA was not added to the work item. Qualcomm denies that its representative said that "major companies that had signed on to the work item would oppose any work item including U-TDOA". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 64.
- 65. Qualcomm admits that AT&T sells mobile phones that use Qualcomm chipsets. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 65 that "AT&T is a major purchaser Ericsson and Alcatel-Lucent RAN equipment". Qualcomm denies the remaining allegations of paragraph 65.
- 66. Qualcomm denies that there was any agreement between Qualcomm and Ericsson. The allegation as to what "the 3GPP rules provide" is a legal conclusion to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 66.
- 67. Qualcomm admits that a representative from TruePosition "proposed to add U-TDOA to the work item" that had been submitted by Qualcomm, and that UTDOA

was not added to this work item. Qualcomm denies the remaining allegations in paragraph 67.

- 68. Qualcomm denies that there was any agreement among the corporate defendants and that any actions were taken in furtherance of any such agreement. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegation that actions of the Alcatel-Lucent Chairman violated 3GPP rules. The remaining allegations of paragraph 68 are legal conclusions to which no response is required.
- 69. Qualcomm admits that at the March 2009 RAN Plenary #43 in Biarritz, France, "TruePosition submitted a proposal to add U-TDOA to the positioning work item", and that companies including AT&T supported this proposal. Qualcomm denies the remaining allegations of paragraph 69.
- 70. Qualcomm admits that TruePosition "proposed a separate work item for U-TDOA standardization", which "was supported by AT&T, among others". Qualcomm admits that "TruePosition proposed to assign its separate U-TDOA work item to the RAN2 Working Group", that "the work item affected RAN2 Working Group specifications", and that RAN2 was not chaired by one of the corporate defendants. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 70 that the RAN2 Chair "was neutral toward the various positioning technologies", that "Ericsson proposed at the RAN Plenary that the TruePosition work item be assigned to the RAN1 Working Group", and that the RAN Plenary Chairman "overruled any objections to Ericsson's proposal, and assigned the work item to the RAN1 Working Group". The allegations in paragraph 70 that TruePosition's work item "properly belonged in the RAN2 Working Group" is a legal conclusion to which no response is required. Qualcomm denies the remaining allegations of paragraph 70.
- 71. Qualcomm admits that "The GSM and UMTS standards provided for multiple alternative positioning technolog[ies], including U-TDOA". Qualcomm denies that the corporate defendants conspired "to coordinate . . . due process rules violations against U-TDOA and TruePosition", that TruePosition was required "to prove that U-TDOA would deliver added benefits over other positioning technologies in order to be considered for inclusion in the LTE standard", that any restrictions imposed were "unfair and unprecedented", and that any "restrictions proposed by the Ericsson RAN1 Chairman, unfairly targeting only U-TDOA, were approved and imposed by the Alcatel-Lucent RAN Plenary Chairman in furtherance of" any conspiracy among the corporate defendants. Qualcomm denies that "the corporate defendants were able to . . . delay and potentially preclude 3GPP from including U-TDOA in the LTE standard". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 71.
- 72. Qualcomm denies that there was any conspiracy between or among the corporate defendants as against TruePosition. Qualcomm admits that TruePosition "submitted a list of 'simulation' testing assumptions" at the June-July 2009 RAN1 Working Group meeting in Los Angeles, California. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 72.

- 73. Qualcomm denies that it "intended to submit flawed and pretextual simulations in future meetings as a further tactic to defeat or impede U-TDOA standardization". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 73.
- 74. Qualcomm denies the allegations of paragraph 74.
- 75. Qualcomm denies the allegations of paragraph 75.
- 76. Qualcomm denies that any significant number of companies "were unwilling to approve progress for O-TDOA due to unresolved technical issues", and that Qualcomm "ignored" "protestations" from such companies or "supported" the Ericsson Chairman in "ignoring" such "protestations". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 76.
- 77. Qualcomm admits that "In the October 2009 RAN1 Working Group meeting #58-bis in Miyazaki, Japan, TruePosition" was "the only company to submit U-TDOA simulations for this meeting". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 77.
- 78. Qualcomm denies that its actions were "coordinated" with the other corporate defendants, that Qualcomm and other corporate defendants "control" the RAN3 Group, that the corporate defendants acted in a coordinated fashion "to create more roadblocks to consideration of U-TDOA and thereby keep U-TDOA out of Release 9 and LTE standards", and that any representative of Qualcomm was "poised to take the handoff from the Ericsson RAN1 Chairman". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 78.
- 79. Qualcomm admits that the Chairman of RAN1 at the time covered by this allegation was an Alcatel-Lucent representative. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 79.
- 80. Qualcomm denies that "the corporate defendants acted in collusion to continue their baseless discrimination against U-TDOA, so as to push U-TDOA standardization to a later release", and that there was a "conspiracy to exclude rather than facilitate U-TDOA standardization". Qualcomm denies that the Alcatel-Lucent RAN1 Chairman "insisted . . . that TruePosition attempt to make progress offline with Ericsson, fully aware that Ericsson had agreed as part of a conspiracy to exclude rather than facilitate U-TDOA standardization". Qualcomm denies that there was any "discrimination" of which the Alcatel-Lucent Chairman could approve. The allegation in paragraph 80 regarding 3GPP rules is a legal conclusion to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 80.
- 81. Qualcomm admits that "The November 2009 meeting #59 in Jeju, South Korea was supposed to be the final RAN1 Working Group session before the cut-off for

including technologies in Release 9", and that "both Ericsson and Qualcomm submitted simulations" at this meeting, and that Qualcomm's past simulations for other technologies characteristically were "detailed, competent, and conscientious". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 81: (1) contained in paragraph (a), (2) that Qualcomm's past simulations for other technologies characteristically were "lengthy", (3) that TruePosition questioned Qualcomm at the meeting about allegedly "obvious errors and inconsistencies", and that (4) the Alcatel-Lucent Chairman violated 3GPP rules in various ways. Qualcomm denies the remaining allegations in paragraph 81, including that it had "no answers" to any questions about its simulations from TruePosition.

- 82. Qualcomm denies that its simulation results were "untimely, biased and flawed", or that they were "skewed by the irrationally-inflated simulation parameters permitted by the Alcatel-Lucent RAN1 Chairman". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 82.
- 83. Qualcomm admits that "In June 2010, O-TDOA was complete and officially included in Release 9". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 83 that "AT&T and T-Mobile also supported advancement of U-TDOA past the evaluation phase and into specification work" at the March 2010 Plenary, and that "Ericsson first opposed continuing with U-TDOA standardization at all, then continued to assert the need for more simulations at unreasonably stringent levels". Qualcomm denies the remaining allegations of paragraph 83.
- 84. Qualcomm denies that "The leadership of all TSG and RAN Groups convene before each Plenary meeting to identify and discuss issues under consideration", but admits that the leadership of all TSG and RAN Groups have on occasion convened before Plenary meetings "to identify and discuss issues under consideration". Qualcomm admits that between July and September 2010 the leadership included representatives from Alcatel-Lucent (as Chairman of RAN1) and Qualcomm (as Chairman of RAN 3). Qualcomm denies the remaining allegations of paragraph 84.
- 85. Qualcomm denies that any actions by Alcatel-Lucent were taken in furtherance of a conspiracy with Qualcomm, and that Qualcomm coordinated any misconduct. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 85.
- 86. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 86 that at the September 2010 RAN Plenary "TruePosition and two major U.S. carriers strongly supported U-TDOA moving forward promptly out of RAN1 to the specification work RAN2 and RAN3", and that "This would have enabled U-TDOA to remain on schedule for standardization in Release 10". Qualcomm admits that "Neither Ericsson nor Qualcomm produced additional accuracy simulations" at the September 2010 Plenary. Qualcomm denies the remaining allegations of paragraph 86.

- 87. Qualcomm admits that "At the October 2010 RAN1 Working Group meeting #62-bis in Xi'an, China", TruePosition, Alcatel-Lucent and others "submitted and presented simulation results" regarding UTDOA standardization. Qualcomm denies that there were any "coordinated efforts to stymie progress on U-TDOA" that Alcatel-Lucent and Ericsson could "persist[] in". Qualcomm denies that Alcatel-Lucent sought to standardize for U-TDOA only a technology known as the Sounding Reference Signal ('SRS') method" "To throw new delays into U-TDOA standardization". Qualcomm denies that "The Alcatel-Lucent results were flawed and pretextual, because it was not technologically possible that SRS alone would perform better than a combined SRS/SPS solution". Qualcomm denies that "Based on these manufactured results, Ericsson, Qualcomm, and Alcatel-Lucent opposed any effort relating to SPS standards support". The allegation in paragraph 87 that TruePosition's submission was "timely" is a legal conclusion to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations in paragraph 87.
- 88. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations in paragraph 88.
- 89. The allegations in paragraph 89 that 3GPP rules were violated are legal conclusions to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 89.
- 90. Qualcomm admits that at "the November 2010 Working Group meeting #63 in Jacksonville, Florida", Ericsson submitted a summary and analysis of UTDOA simulations results that had been presented by Ericsson and other companies. The allegation that a TruePosition representative "should have been tasked with creating the report" is a legal conclusion to which no response is required. Qualcomm denies that it "colluded" with Ericsson and Alcatel-Lucent "to manipulate and bias the report", and denies that the report included "facially-flawed and thoroughly discredited Qualcomm results" or contained "sham Qualcomm results" or "flawed Qualcomm data". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 90.
- 91. Qualcomm admits that a work item that was accepted at the December 2010 RAN Plenary #50 in Istanbul, Turkey, included aspects of UTDOA technology. Qualcomm denies that there were "controversies manufactured through the coordinated efforts of the corporate defendants in the October and November RAN1 Working Group meetings". Qualcomm denies that it was decided at this meeting that "U-TDOA would be standardized only for the SRS transmission method" and "would not provide either the option to use only the SPS method, or a hybrid of both the SRS and SPS methods". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 91 regarding the earliest completion date for Release 11.
- 92. Qualcomm denies the allegations of paragraph 92.

- 93. Qualcomm admits that "At the RAN Plenary #50 in Istanbul, Turkey in December 2010, the RAN Plenary reviewed the work item" on UTDOA technology and that Ericsson made comments on this work item. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 93.
- 94. Qualcomm admits that the RAN2 Chair in December 2010 was from Samsung, that the RAN3 Chair at that time was from Qualcomm, and that the RAN3 Vice-Chair at that time was from Ericsson. Qualcomm denies that it was part of any "conspiracy", that Qualcomm argued at the RAN Plenary meeting that the UTDOA work item (as described in the allegations in paragraph 91) "should be assigned to the RAN3 Working Group" "in furtherance of" any conspiracy, and that an Ericsson representative stated that RAN3 will "fix" RAN2 decisions, "referring to the corporate defendants' desired elimination of the standalone LMU option". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 94.
- 95. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 95 regarding what the RAN2 Chairman had accepted and observed. Qualcomm denies the remaining allegations of paragraph 95.
- 96. Qualcomm denies that the corporate defendants had a mutually agreed or understood objective that was "further amplified at the March 2011 RAN TSG Plenary #51 meeting in Kansas City, Missouri". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 96.
- 97. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 97.
- 98. Qualcomm denies that there were any "repeated machinations of the corporate defendants". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 98.
- 99. Qualcomm admits that "In the August 2011 RAN2 meeting #75 in Athens, Greece, TruePosition was scheduled to present an architecture design for U-TDOA", and that the "RAN2 Chair and the majority of the Working Group approved TruePosition's proposed architecture". Qualcomm denies that the RAN3 Chair could "delay or undo" a RAN2 decision. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 99.
- 100. Qualcomm admits that Ericsson submitted a contribution at the November 2011 RAN1 meeting #67 in San Francisco. Qualcomm denies that it was part of any conspiracy among the corporate defendants. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 100.
- 101. Qualcomm denies that "the corporate defendants manufactured a new issue intended to send U-TDOA standardization back to square one", that Qualcomm was part of any conspiracy of "collusive machinations" against UTDOA, that Qualcomm took any coordinated actions intended to "interpose months of additional delay against U-TDOA

standardization" or bring UTDOA standardization "to a virtual standstill", and that "the Qualcomm RAN3 Chairman deemed TruePosition's U-TDOA work item to be at a stalemate where no further progress could occur, and so informed the RAN Plenary in the December 2011 meeting in Berlin". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 101.

- 102. Qualcomm denies the allegations of paragraph 102.
- 103. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 103, except that it admits that a form of UTDOA was standardized for UMTS.
- 104. Qualcomm denies that it "collude[d]" with the other corporate defendants against TruePosition, denies that Qualcomm was part of any "agreement to secrecy", and denies that TruePosition and other supporters of UTDOA were denied a "full and fair opportunity" to "put U-TDOA in the same work item or submit a timely proposal for U-TDOA". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 104.
- 105. Qualcomm denies the allegations of paragraph 105.
- 106. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegation of paragraph 106 regarding the "collective market power" of the corporate defendants, among other reasons because the Amended Complaint does not purport to define a "market for mobile device chipsets in the United States". Qualcomm denies the remaining allegations of paragraph 106.
- 107. Qualcomm denies the allegations of paragraph 107.
- 108. Qualcomm denies the allegations of paragraph 108.
- 109. Qualcomm denies the allegations of paragraph 109.
- 110. Qualcomm denies the allegations of paragraph 110.
- 111. Qualcomm denies the allegations of paragraph 111.
- 112. Qualcomm denies the allegations of paragraph 112.
- 113. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegation in paragraph 113 that "Disputes within 3GPP over the details of implementing U-TDOA—*e.g.*, whether to limit standardization to the SRS signal or whether to enable U-TDOA in standalone LMUs or only integrated in RAN equipment—had no impact whatsoever upon Qualcomm's chipsets or business". Qualcomm denies the remaining allegations of paragraph 113.
- 114. The allegations of paragraph 114 are legal conclusions to which no response is required.

- 115. Qualcomm denies the allegations of paragraph 115.
- 116. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 116.
- 117. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 117 that "3GPP is an unincorporated association" and that the quoted language appears in a 3GPP publication dated September 2011. The remaining allegations of paragraph 117 are legal conclusions to which no response is required.
- 118. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 118.
- 119. The allegation of paragraph 119 that "ETSI is responsible to ensure that its members follow ETSI due process rules and regulations when those members act within ETSI or when they participate in ETSI Partnership Projects, including 3GPP" is a legal conclusion to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 119.
- 120. Qualcomm denies that it engaged in either "anticompetitive actions occurring within the 3GPP RAN TSG and RAN Working Groups" or "violations of the SSO Rules" or any "conspiracy". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 120.
- 121. Qualcomm denies the allegations of paragraph 121.
- 122. Qualcomm denies the allegations of paragraph 122.
- 123. The allegations of paragraph 123 present legal conclusions to which no response is required.
- 124. Qualcomm admits that commercially important purposes such as navigation can be accomplished by GPS-based location technologies, including A-GPS, but denies that such technologies are necessarily "less accurate" or that such purposes are "less critical". Qualcomm denies that A-GPS technologies require a "clear line of sight" to satellites and "cannot typically reach" "dense urban landscapes". Qualcomm admits that positioning technologies for E-911 public safety are required to provide accurate location information in many types of environments.
- 125. Qualcomm admits that "Customers for positioning technology include wireless carriers and" governments, and that certain governments have set standards with respect to positioning technology. The remaining allegations of paragraph 125 present legal conclusions to which no response is required.
- 126. The allegations of paragraph 126 present legal conclusions to which no response is required.

- 127. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 127.
- 128. The allegations of paragraph 128 present a legal conclusion to which no response is required.
- 129. Qualcomm denies that "Network-based positioning technologies like U-TDOA have significant advantages over handset-based systems, including O-TDOA". The allegation of paragraph 129 concerning "the market for law enforcement and security purposes" presents a legal conclusion to which no response is required. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 129.
- 130. Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegations of paragraph 130 that "Positioning technology is not intrinsic to the design, manufacture, and sale of RAN equipment", that "RAN equipment, which is situated on cellular telephone towers, connects the mobile device handset to the mobile phone network", and that "high accuracy cellular-based positioning technology requires interoperability with RAN equipment". The remaining allegations of paragraph 130 present legal conclusions to which no response is required.
- 131. Qualcomm admits that OTDOA requires "some interface with RAN equipment" "in order to derive the data necessary to determining the location of a mobile device and to communicate that location to the intended recipient, such as a PSAP or law enforcement agency". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the remaining allegations of paragraph 131.
- 132. Qualcomm admits that "Ericsson and Qualcomm sell O-TDOA technology for RAN equipment and handsets, respectively", and "that O-TDOA requires technology to be incorporated in both the RAN equipment and the handsets". Qualcomm lacks knowledge or information sufficient to form a belief about the truth of the allegation of paragraph 132 regarding Alcatel-Lucent's intentions. The allegations of paragraph 132 concerning alleged markets present legal conclusion to which no response is required. However, Qualcomm admits that it does not compete against Ericsson in the sale of either RAN equipment (which Qualcomm does not sell) or cellular chipsets (which Ericsson does not sell).
- 133. The allegations of paragraph 133 present legal conclusions to which no response is required, except that Qualcomm denies that any "innovation market for positioning technology" has been "historically defined" in any way.
- 134. The allegations of paragraph 134 present legal conclusions to which no response is required.
- 135. The allegations of paragraph 135 present a legal conclusion to which no response is required.

- 136. The allegations of paragraph 136 present a legal conclusion to which no response is required.
- 137. Qualcomm denies the allegations of paragraph 137.
- 138. Qualcomm denies the allegations of paragraph 138.
- 139. Paragraph 139 does not contain any allegation to which Qualcomm can respond.
- 140. The allegation in paragraph 140 presents a legal conclusion to which no response is required.
- 141. Qualcomm denies the allegations of paragraph 141.
- 142. Qualcomm denies the allegations of paragraph 142.
- 143. Qualcomm denies that it undertook any improper action "knowingly and intentionally". The remaining allegations in paragraph 143 present legal conclusions to which no response is required.
- 144. The allegations in paragraph 144 present legal conclusions to which no response is required.
- 145. Qualcomm denies the allegations in paragraph 145.
- 146. Qualcomm denies the allegations in paragraph 146.
- 147. Qualcomm denies that, with respect to sales to carriers deploying 4G networks, "the corporate defendants are able to compete for those sales, while TruePosition and other vendors of standalone U-TDOA-based LMUs are foreclosed from bidding for those sales", and that anything in this regard would be "Because of" "unlawful actions of the defendants". The remaining allegations in paragraph 147 present legal conclusions to which no response is required.
- 148. Qualcomm denies the allegations of paragraph 148.
- 149. The allegation in paragraph 149 presents a legal conclusion to which no response is required.
- 150. Qualcomm denies the allegations of paragraph 150.
- 151. Qualcomm denies the allegations of paragraph 151.
- 152. Qualcomm denies the allegations of paragraph 152.
- 153. Qualcomm denies the allegations of paragraph 153.
- 154. Paragraph 154 does not contain any allegation to which Qualcomm can respond.

AFFIRMATIVE DEFENSES

First Affirmative Defense

TruePosition's complaint fails to state a claim upon which relief can be granted.

Second Affirmative Defense

TruePosition's claim is barred, in whole or in part, because any and all of Qualcomm's conduct has been reasonable and based on independent, legitimate business and economic justifications.

Third Affirmative Defense

TruePosition's claim is barred because TruePosition does not have antitrust standing.

Fourth Affirmative Defense

TruePosition's claim is barred, in whole or in part, because TruePosition has not suffered actual, cognizable injury under the antitrust laws.

Fifth Affirmative Defense

TruePosition's claim is barred, in whole or in part, for failure to allege any legally cognizable market for antitrust purposes.

Sixth Affirmative Defense

TruePosition's claim is barred, in whole or in part, because any and all injuries and damages alleged in the Complaint, the fact and extent of which are expressly denied by Qualcomm, were directly and proximately caused by or contributed to by the statements, acts and/or omissions of TruePosition.

Seventh Affirmative Defense

TruePosition has not suffered any damages as a result of the conduct complained of, and has failed to mitigate any damages that might be alleged.

Eighth Affirmative Defense

The relief sought by TruePosition is barred, in whole or in part, because the alleged damages sought are too speculative and uncertain, and because of the impossibility of the ascertainment and allocation of such alleged damages.

Reservation of Defenses

Qualcomm reserves the right to assert other defenses and affirmative defenses as this action proceeds.

Dated: October 4, 2012

/s/ Robert N. Feltoon

Robert N. Feltoon CONRAD OBRIEN PC 1500 Market Street West Tower - Suite 3900 Philadelphia, PA 19102 (215) 864-8064

Roger G. Brooks CRAVATH, SWAINE & MOORE LLP Worldwide Plaza 825 Eighth Avenue New York, NY 10019 (212) 474-1000

Counsel for Qualcomm Incorporated

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CERTIFICATE OF SERVICE

I, Robert N. Feltoon, hereby certify that I caused a true and correct copy of

the foregoing Answer of Defendant Qualcomm to be electronically filed pursuant to the

Court's electronic court filing system and thereby served on all counsel of record, and

that the filing is available for downloading and viewing from the electronic court filing

system.

/s/_Robert N. Feltoon

Robert N. Feltoon

Dated: October 4, 2012

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